AMENDED CLAIMS

1. An electromagnetic radiation therapy system comprising means for emitting divergent electromagnetic radiation between 980 nm and 1500 nm and being capable of producing, at the site being treated, a radiation intensity of at least 50 μWatts/cm^2 and up to 2 Watts/cm^2.

2. An electromagnetic radiation therapy system according to either of Claims 1 or 2 wherein the wavelength is in the range 980nm-1300nm.

3. An electromagnetic radiation therapy system according to any preceding claim wherein the wavelength is at, or about, 1072nm.

4. An electromagnetic radiation therapy system according to any preceding claim wherein the wavelength is at, or about, 1268nm.

5. An electromagnetic radiation therapy system according to any preceding claim wherein the half angle divergence of the electromagnetic radiation is in the range 15° to 45°.

6. An electromagnetic radiation therapy system according to any preceding claim wherein the electromagnetic radiation is continuous or pulsed.

7. An electromagnetic radiation therapy system according to any preceding claim wherein, in the instance of the electromagnetic radiation being continuous, the intensity is at least 50 μWatts/cm^2 for treatment of eyes and mucous membranes and up to 2 Watts/cm^2.

8. . An electromagnetic radiation therapy system according to any preceding claim wherein, in the instance of the electromagnetic radiation being continuous, the intensity is at least 500 μWatts/cm^2 for treatment of skin and up to 2 Watts/cm^2.

9. An electromagnetic radiation therapy system according to any of Claims 1-6, wherein in the instance of the electromagnetic radiation being pulsed, the intensity is at least 50 μWatts/cm^2 peak power for treatment of eyes and mucous membranes and the average power is up to 2 Watts/cm^2.

10. An electromagnetic radiation therapy system according to any of Claims 1-6, wherein in the instance of the electromagnetic radiation being pulsed, the intensity is at least 500 μWatts/cm^2 peak power for treatment of skin and the average power is up to 2 Watts/cm^2.

11. An electromagnetic radiation therapy system according to any of Claims 1-6 or 9 or 10 wherein the average power of the pulsed electromagnetic radiation intensity is in the region of 50-100μWatts/ cm^2.

12. An electromagnetic radiation therapy system according to any of Claims 1-7 or 9-11 wherein pulsed electromagnetic radiation is applied for periods of at least 10-15 μseconds.

13. An electromagnetic radiation therapy system according to any of Claims 1-7 or 9-12 wherein the pulsed electromagnetic radiation is applied at a frequency/repetition rate in the range 480-800 Hz.

14. An electromagnetic radiation therapy system according to Claim 13 wherein the frequency/repetition rate is at, or about, 600 Hz.

15. An electromagnetic radiation therapy system according to any of Claims 1-7 or 9-14 wherein the pulsed electromagnetic radiation is applied to the affected area for at least 30 seconds and up to 15 minutes.

16. An electromagnetic radiation therapy system according to any preceding claim wherein the electromagnetic radiation therapy system also includes means for

reducing the amount of ambient radiation which impinges on the site of treatment.

17. An electromagnetic radiation therapy system according to Claim 16 wherein the means for excluding ambient radiation excludes radiation below 400-500 nm.

18. An electromagnetic radiation therapy system according to any preceding claim further including means for fixing the intensity of the radiation within a pre-determined range.

19. An electromagnetic radiation therapy system according to any preceding claim wherein radiation output is monitored with a visible display indicating correct function of the device both for intensity and wavelength.

20. An electromagnetic radiation therapy system according to any preceding claim further including further including means for controlling the duration of the application of the radiation.

21. An electromagnetic radiation therapy system according to any preceding claim wherein the radiation producing means are solid state light emitting devices,

22. An electromagnetic radiation therapy system according to Claim 21 wherein the solid state light emitting devices are solid state light emitting diodes or gas discharge devices or a laser diode device.

23. An electromagnetic radiation therapy system according to either Claim 21 or 22 wherein radiation from such devices is electrically operated or delivered to an applicator via a fibre-optic delivery system.

24. An electromagnetic radiation therapy system according to any of Claims 21-23 wherein the radiation emitter includes a PN junction arranged to emit radiation with a wavelength centring at, or about, 1072nm or at, or about, 1268 nm.

25. An electromagnetic radiation therapy system according to Claims 24 wherein a single light diode assembly include a plurality of orientated junctions.

26. An electromagnetic radiation therapy system according to Claims 22 wherein the gas discharge device may include a mixture of gases which will give an output at the desired wavelength, for instance, 1072 nm or 1268 nm.

27. Divergent electromagnetic radiation having a wavelength of between 980 and 1500 nm and an intensity of at least 50μWatts/cm^2 and up to 2 Watts/cm^2 for use in treating an area of biological tissue of a living human or animal subject.

28. Divergent electromagnetic radiation according to Claim 27 for treating herpetic infections, bacterial and/or viral infections of the skin or upper respiratory tract, ophthalmic conditions such as "dry eye syndrome", caustic injuries, musculoskeletal conditions, inflammatory conditions such as rheumatoid arthritis and malignancies, reduction of scarring, promotion of wound healing, improving sports performance and providing acute and chronic pain relief.

29. Divergent electromagnetic radiation according to Claim 27 for use in treating the immune system as a result of which a human or animal subject is able to combat infections, such as the herpes virus.

30. A method of treating an area of biological tissue of a living human or animal subject comprising applying to said area divergent electromagnetic radiation having a wavelength of between 980 and 1500 nm at an intensity of at least 50μWatts/cm^2 and up to 2 Watts/cm^2.